

IX. *A short Account by James Parsons, M.D. F. R. S. of a Book intituled, Traité des Sens, &c. by M. le Cat, M.D. F. R. S. printed at Rouen, 1740. 8^{vo}.*

Read Dec. 16.
1742.

THIS Treatise appears, by the Advertisement prefixed to it, to be a Part of a Physiological Work, which the Author says is not likely to be soon published; and that he has therefore exhibited this Part for the Use of the Curious, and Lovers of Philosophy, who might not be so agreeably entertained by the rest of the Work, as treating chiefly of the Human Body, and therefore calculated rather for those of the Faculty of Medicine.

He begins the Book with Page 201. and says he has, before, established certain general Principles of *Sensation*, and that now he proceeds to recount the particular Parts with which Nature has furnished the animal Oeconomy, serving to our different Senses; and then expatiates a little upon the general Utility of them.

His First Chapter treats of the Sense of *Feeling*, wherein he has compiled all the different *Phænomena* that regard this Sense, as those of Heat, Cold, and other Objects of Feeling, with the Structure of the Skin, to which he thinks fit to subjoin Two known Histories, one of a blind Organist in *Holland*, who distinguished all kinds of Coins, and played at Cards, by Feeling; and the other of the famous Statuary *Ganibassus*, who, though stone-blind, could
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by Feeling make a Statue in Clay, perfectly like what he felt. Our Author adds something of *Tickling*, and endeavours to prove, that Imagination has a great Share in the Cause of this Sensation, as well as the others; and thence he falls upon an Account of another Sense, which he brings under this Head; which he calls, *la Chatouillement de l'Amour*, of which he gives a florid Definition.

Tasting is his next Subject, wherein, as in the foregoing Chapter, he has drawn together the several Sections relating to it, as, an Account of the Organs of Taste, the Mechanism of *Savours*, and the manner of their being varied into compound Tastes. His Comparison here is new; he says, Since the Principles of Savours are Salts, both fixed and volatile, that Water, Earth, and Sulphur, serve to make the great Variety, and different Kinds, that are in Taste, just as Shadows variously mingled with Light form different Appearances; not that the Shadow is capable of making an Impression upon our Organs of Sight, but the Light alone; as the Salts alone are, upon our Organs of Taste. He has also some Reasoning upon the Difference that is in Mens Appetites to some Eatables, which were before disagreeable. His Reason is, not that the Organs differ at any time from what they always were, but because the Soul sometimes changes her Ideas, even from the same Impressions, and that therefore there can be no Ideas essential to any Impressions; or at least, that there are none which the Soul cannot change: He also says, that Imagination is much concerned in the Variation of Tastes.

The Sense of *Smelling* is discussed in his Third Chapter, wherein he observes the same Method as in the Two former, in describing the Mechanism of the Organs serving to that Sense, and accounting for the Conveyance of Odours to those Organs; and for the *Stimulus* of some odoriferous Particles causing Tears to flow, as well as Sneezing caused by a glaring Light; and, after making some Reflections on the many Effects of Smells upon the Human Body, and the exquisite Sense of Smelling in some Animals, he recites the Story told by Sir *K. Digby*, of the Boy brought up in a Forest, whose Smell was so exquisite as to perceive the Approach of Enemies, and warn his Parents of them. Our Author found this Story elegantly told, and reasoned upon, in *Monsieur Verduc's* Book called, *Usage des Parties*. He also mentions the Perfection of Smelling in the Inhabitants of the *Antibes*, who can run a Man upon the Nose like an Hound; and concludes this Section with a Relation of a *Frier of Prague*, from the *Journals des Scavans*, who could not only distinguish different Persons from each other by Smelling, but also an incontinent Woman from a chaste one; and adds, in a joking Strain, that this Man had begun a Treatise of Odours before he died, which the Journalists much regretted the Loss of: But, says *Monsieur le Cat*, for my part, I do not know but a Person so exquisite in this kind of Knowledge would be dangerous in Society.

He proceeds next to treat of *Hearing*, and brings under that Head the whole Mechanism and Doctrine of Sounds; the Vibrations of all sounding Bodies: And from the Experiment of holding a Candle near any vibrating or sounding Body, without the Flame's
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being moved or otherways affected, he argues, that the common Air does not produce the Sound, but a more subtil Fluid better proportioned to the Organs of Hearing: Here he runs into a Detail of the Principles of the Chords and Tones of Music, and makes a new and curious Comparison between the principal Colours in the Rays of Light, and the fore-said Fluid, which is more or less subtil in the Air, some Particles of which are only capable of being moved to express low Tones, others higher, and to on successively, as far as the Compass of Music reaches; just as the Light is composed of certain kinds of Rays, some of which produce *Red*, some *Green*, &c. This being supposed, says he, it may be conceived, that every Tone will move the Fluid that is proper to itself; and by that means the Ear may receive at once the Impressions of every Fluid, as the Eye receives the Impulsions of several coloured Rays at the same Instant. He adds to this, by way of Reasoning, that when a single String of an Instrument is touched, though the generality of Mankind can distinguish but One Tone, which he calls the *fundamental Sound*, yet People accustomed to Harmony can distinguish, besides, an *Octave*, a *Fifth*, and a *Third*, covered by this *fundamental Tone*; for the *Octave* is half that Sound, or the Produce of half the String; the *Fifth* is the Produce of Two-thirds, and the *Third* is the Produce of Four-fifths of the same String.

He proceeds to reason upon this in an agreeable Manner, and concludes his above-mentioned Comparison to this Purpose: Thus there are in the vibrated String all the Harmonics or Chords at once, which

which compose the *fundamental Sound*, by vibrating each its particular proper Fluid at the same time; just as the Assemblage of all the different primitive coloured Rays meeting together, makes the white Colour or Light: And so the Ear of a good Musician is a kind of *Prism*, which can separate and distinguish the Sounds or Tones from each other in the *fundamental Sound*. He gives an anatomical Description of the Organs of Hearing; and has added some good Figures of the external and internal Parts of the Ear, with the *Eustachian Tube*, much after the manner of *Du Verney*.

He has also the Figure of an Instrument, Page 292. to help those that are hard of Hearing, which he claims the Invention of. The particular *Form* of this Instrument may be new to the Author; yet we have had of this Kind in Use many Years in *England* for the same Purpose. He finishes this Section with some Reflections upon a young Man of a Town called *Chartres*, who was born deaf and dumb, and whose Hearing suddenly came to him, and who spoke some Months after. In this Place he has a very good Figure of the *Basis Cerebri*, by a transverse Section through the *Frontal Sinuses* a little above the Eyes, and continued through the *temporal Bones*; demonstrating the *Originations* and *Exit* of the Nerves, with the Conjunction of the *vertebral* and *carotid Arteries*, according to the Dissection of the famous *Willis*; and then proceeds to his last Section, which treats of *Seeing*.

This Section, in a word, is on the Structure of the Eye, and all the *Phænomena* of Vision. He begins it with the Doctrine of *Lights* and *Colours*, making
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use of many Experiments and Explanations of the great Sir *Isaac Newton*; having also added several of his own, besides some little Cavils, a mere *Jeu des Mots*, against that great Man's Doctrine of *Attraction*, to which he prefers the *Impulsion* of *Cartesius*. He quotes against Sir *Isaac*, *M. de Fontaine*, *M. Bannier*, and *M. Voltaire*; and as our young Author had a mind to oppose the Opinions of one of the greatest Abilities in the Sciences, common Prudence should have informed him, that the Name *Newton* bespeaks the greatest Modesty and Diffidence in the Attempt. Our Author amuses himself thus against that *Prince* of Philosophers, which is the more strange; since if he had wrote nothing on the Subject, *Monsieur le Cat* would have wanted a great Part of his Furniture for this Section.

The principal Authors besides, regarding Anatomy and Physiology, which our Author seems to have had in his View, are *Du Verney*, *Willis*, *Synac* upon *Heister*, and *Verduc's* excellent Book *L'Usage des Parties*. However, this *Treatise* of the Senses is judiciously compiled; nor does it want several ingenious Embellishments from the Author, besides the Opinions of several others; we may therefore conclude it to be a very useful Book.